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THE OFFICE OF REGULATORY STAFF

SETTLEMENT TESTIMONY AND EXHIBITS

OF

M. ANTHONY JAMES, P.E.

May 28, 2008

DOCKET NO. 2008-1-E

ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS
CAROLINA POWER & LIGHT COMPANY
d/b/a PROGRESS ENERGY CAROLINAS, INC.

SETTLEMENT TESTIMONY OF

M. ANTHONY JAMES, P.E.

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2008-1-E

IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS

CAROLINA POWER AND LIGHT COMPANY

d/b/a PROGRESS ENERGY CAROLINAS, INC.

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Anthony James. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201. I am employed by the State of South Carolina as a Senior Specialist in the Electric Department for the Office of Regulatory Staff ("ORS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a bachelor's degree in engineering from the University of South Carolina as well as a master's degree in environmental resources management and have over twenty years of experience as a project engineer in environmental regulatory compliance. I am a professional engineer registered in the State of South Carolina, a member of the South Carolina Society of Professional Engineers and a member of the NARUC Staff Subcommittee on Electricity.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to set forth ORS Electric Department's findings and recommendations resulting from our review of Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.'s ("Company") fuel expenses and power plant operations used in the generation of electricity for the period under review. The review period includes actual data for April 2007 through February 2008, estimated data for March 2008 through June 2008, and forecasted data for July 2008 through June 2009.

Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE COMPANY'S FUEL EXPENSES?

A. ORS reviewed various fuel and performance related documents as part of its review. The information reviewed addressed energy generation and plant maintenance activities. In preparation for this proceeding, ORS reviewed the Company's monthly fuel reports including power plant performance data, unit outages and generation statistics. ORS reviewed nuclear fuel, coal and transportation contracts. ORS reviewed the reagent related contracts for ammonia and limestone. ORS also reviewed the Company's policies and procedures for fuel procurement. All information was reviewed with reference to the Company's existing Adjustment for Fuel and Variable Environmental Costs Rider and the Fuel Clause statute.

Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE COMPANY'S REQUEST IN THIS PROCEEDING?

A. ORS met with Company personnel from various departments including Power System Operations, Regulated Fuels and Transportation, Natural Gas and Oil Procurement, Power Trading Operations, Nuclear Fuel Supply, Nuclear Engineering, and Fuel Forecasting at the Company's headquarters in Raleigh, NC. Also, ORS reviewed documentation of natural gas purchases for operation of the Company's natural gas fueled generating facilities. In addition, on a daily basis, ORS keeps abreast of the coal and natural gas industry through industry and governmental publications.

Q. DID ORS EXAMINE THE COMPANY'S PLANT OPERATIONS FOR THE REVIEW PERIOD?

A. Yes. ORS reviewed the Company's operation of its generating facilities, including nuclear plant operations, to determine if the Company made reasonable efforts to maximize unit operations and minimize fuel costs. Page 1 of Exhibit MAJ-1 shows the monthly availability of the Company's significant generating units. The capacity factors on Page 2 of Exhibit MAJ-1 indicate the monthly utilization of each unit in the production of power.

Q. PLEASE EXPLAIN THE SIGNIFICANCE OF PLANT AVAILABILITY AND HOW IT IS USED IN YOUR EVALUATION AS REPRESENTED ON EXHIBIT MAJ-2.

A. Exhibit MAJ-2 complements Exhibit MAJ-1. It shows the major fossil and nuclear unit outages during the review period. On Page 1 of Exhibit MAJ-1, listings with zero availability as well as those listings with months of less than 100% availability led us to investigate reasons for such occurrences. These

findings are examined by referencing Exhibit MAJ-2. As an example, Page 1 of Exhibit MAJ-1 shows Roxboro Unit #4 had zero availability in November 2007. Page 1 of Exhibit MAJ-2 explains the reason for the zero availability during that time period. The Roxboro Unit #4 had an outage between October 19, 2007 and December 2, 2007; and therefore, the unit was not available to generate electricity during this time period.

Q. WOULD YOU EXPLAIN HOW THE OTHER OUTAGES ARE REPRESENTED ON EXHIBIT MAJ-2?

A. Yes. This Exhibit provides explanations for fossil unit outages of 100 hours or greater, as well as all nuclear plant outages during the review period. Although not included in this Exhibit, fossil outages of less than 100 hours were also reviewed and found to be reasonable by ORS.

Q. PLEASE ADDRESS THE OUTAGES AT THE COMPANY'S THREE NUCLEAR STATIONS.

A. Exhibit MAJ-2, page 2 of 2 shows the duration, type and cause of the outages at the Company's three nuclear stations. ORS found that the Company took appropriate corrective action with respect to these outages, and there were no Nuclear Regulatory Commission fines associated with these outages. During the review period, the Company's nuclear system experienced a forced outage rate ("FOR") of 0.58%. The three nuclear stations consisting of four units combined to achieve a net capacity factor of 93.64%. Adjusting for scheduled outages, the Company achieved a net capacity factor of 101.7% for the review period. Table 1

shows that during the current fuel review, the Company improved its FOR and net capacity factor of its nuclear fleet.

Table 1
Historical Nuclear FORs and
Net Capacity Factors for
Progress Energy Carolinas

Docket No.	Company FOR	Capacity Factor
2004-1-E	1.20%	104.40%
2005-1-E	1.30%	101.90%
2006-1-E	1.88%	98.33%
2007-1-E	3.20%	96.37%
2008-1-E	0.58%	101.70%

Q. WHAT WERE THE RESULTS OF YOUR ANALYSIS OF THE COMPANY'S PLANT OPERATIONS FOR THE PERIOD UNDER REVIEW?

A. ORS's review of the Company's operation of its generating facilities resulted in the conclusion that the Company made reasonable efforts to maximize unit operations and minimize fuel costs.

Q. DID ORS REVIEW THE GENERATION MIX UTILIZED BY THE COMPANY DURING THE REVIEW PERIOD?

A. Yes. Exhibit MAJ-3 shows the MWH generation mix for the review period by generation type. As shown in this Exhibit, the higher cost combustion turbine and combined-cycle units contributed a higher percentage of generation during the summer peak months and a lower percentage of generation during the non-summer period. The base load fossil and nuclear units supplied the majority of the year-round generation requirements.

Q. WHY DID YOU REFER TO THE COMBUSTION TURBINE AND COMBINED-CYCLE UNITS AS HAVING HIGHER COSTS?

A. Exhibit MAJ-4 shows the Company's average fuel costs by generating plant on the Company's system for the review period and the megawatt-hours produced by these plants. ORS's review revealed the lowest average fuel cost of 0.456 cents per kilowatt-hour at the Harris Nuclear Station, and the highest average period fuel cost of 6.865 and 10.639 cents at the Richmond County combined-cycle and combustion turbine gas-fired units, respectively. The Company utilizes economic dispatch, which generally tends to dispatch or bring on-line the lowest cost units first.

Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S FORECAST?

A. Yes. As shown in Exhibit MAJ-5, the Company's MWH actual sales versus forecasted sales varied by only 1.84% during the review period. In addition, Exhibit MAJ-6 shows the monthly variance between projected and actual fuel cost factors. The Company's cumulative average projected fuel cost level for the period was 3.25% above the actual resulting cost level.

Q. WHAT OTHER REVIEWS HAS ORS UTILIZED IN MAKING ITS DETERMINATIONS IN THIS PROCEEDING?

A. Exhibit MAJ-7 shows the actual ending balances of over and under-collections of fuel costs beginning December 1979. The Company has experienced over-recovery and under-recovery balances since December 1979.

As of February 2008, the Company recorded a cumulative under-recovery of ($14,452,319).

Q. WHAT OTHER SOURCES DOES ORS USE IN DETERMINING THE REASONABLENESS OF THE COMPANY'S REQUEST?

A. ORS routinely: 1) reviews private and public industry publications as well as those available on the Energy Information Administration's ("EIA") website; 2) conducts meetings with Company personnel; 3) conducts meetings with representatives of industrial users; 4) attends industry conferences; and 5) reviews fuel information as filed monthly by electric generating utilities on Form 423 with the Federal Government. An example of EIA data reviewed is included on Exhibit MAJ-8. This Exhibit provides spot coal price data for a three-year period and includes the most recent upward trend of the average weekly coal commodity spot prices for Central Appalachia beginning late in 2007. The Company generally obtains its coal from the Central Appalachia region.

Q. DO YOU SUPPORT THE SETTLEMENT AGREEMENT EXECUTED BY THE PARTIES IN THIS HEARING?

A. Yes, I do.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Power Plant Performance Data Report
Availability Factors (Percentage)
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

			HISTORICAL DATA			REVIEW PERIOD (ACTUAL) DATA											
PLANT	UNIT	MW RATING	YEAR 2005	YEAR 2006	YEAR 2007	APR 2007	MAY 2007	JUN 2007	JUL 2007	AUG 2007	SEP 2007	OCT 2007	NOV 2007	DEC 2007	JAN 2008	FEB 2008	Average Review Pd.
BRUNSWICK	1	938	92.92	85.69	93.44	79.39	98.76	98.90	99.92	98.01	49.50	99.98	99.87	97.67	99.72	99.98	**92.9**
BRUNSWICK	2	937	84.63	88.49	86.38	37.71	99.44	99.40	99.94	99.97	96.93	99.72	98.89	99.98	99.40	100.00	**93.8**
HARRIS	1	900	98.45	88.38	93.05	100.00	100.00	100.00	100.00	100.00	93.06	24.67	100.00	98.95	100.00	100.00	**92.4**
ROBINSON	2	710	89.05	99.11	88.58	18.79	47.68	99.98	97.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	**87.6**
NUCLEAR TOT		3485	91.26	90.42	90.36	58.97	86.47	99.57	99.30	99.50	84.87	81.09	99.69	99.15	99.78	100.00	**91.7**
MAYO	1	741	98.25	91.99	91.33	98.96	100.00	99.96	95.19	99.73	93.93	92.09	100.00	100.00	99.59	98.01	**98.0**
ROXBORO	2	639	76.44	94.65	85.62	7.51	81.97	99.78	89.31	100.00	83.04	97.64	100.00	99.98	100.00	97.63	**87.0**
ROXBORO	3	705	95.02	80.34	93.76	70.81	96.47	87.89	99.75	99.35	93.26	92.87	99.86	96.19	96.15	91.22	**93.1**
ROXBORO	4	698	93.89	95.64	84.52	97.98	99.75	97.41	93.55	97.34	99.67	61.12	0.00	81.61	100.00	76.50	**82.3**
FOSSIL TOTALS		2783	90.90	90.66	88.81	68.82	94.55	96.26	94.45	99.11	92.48	85.93	74.97	94.45	98.94	90.84	**90.1**
RICHMOND	7	147	88.36	91.66	89.44	100.00	100.00	100.00	100.00	93.03	93.35	0.00	87.10	99.77	100.00	100.00	**88.5**
RICHMOND	8	147	90.56	90.35	82.91	1.42	100.00	100.00	96.19	97.49	100.00	26.65	100.00	98.96	100.00	100.00	**83.7**
RICHMOND	ST4	160	90.39	91.54	96.24	100.00	100.00	100.00	100.00	100.00	100.00	54.84	100.00	100.00	100.00	100.00	**95.9**
CC TOTALS[1]		454	89.77	91.18	89.53	67.14	100.00	100.00	98.73	96.84	97.78	27.16	95.70	99.58	100.00	100.00	**89.4**

[1]CC designates Combined-Cycle units

EXHIBIT MAJ-1
Pg 1 of 2

Power Plant Performance Data Report
Capacity Factors (Percentage)
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

			HISTORICAL DATA				REVIEW PERIOD (ACTUAL) DATA											
PLANT	UNIT	MW RATING	LIFE[1] TIME	YEAR 2005	YEAR 2006	YEAR 2007	APR 2007	MAY 2007	JUN 2007	JUL 2007	AUG 2007	SEP 2007	OCT 2007	NOV 2007	DEC 2007	JAN 2008	FEB 2008	Average Review Pd.
BRUNSWICK	1	938	70.53	94.40	85.45	95.86	81.37	101.21	101.18	101.75	99.17	49.49	102.52	103.24	100.44	102.28	99.47	**94.7**
BRUNSWICK	2	937	67.90	86.07	87.57	87.06	37.82	100.87	99.83	100.15	99.77	97.33	100.69	100.09	101.75	101.16	101.65	**94.6**
HARRIS	1	900	85.74	100.63	84.70	94.04	101.99	101.26	100.07	99.54	98.81	92.63	20.47	102.89	101.48	103.37	102.85	**93.2**
ROBINSON	2	710	76.11	92.89	95.20	92.27	18.03	48.70	102.78	99.41	101.42	102.84	104.20	106.32	106.82	106.87	106.86	**91.3**
NUCLEAR TOT		3485	75.07	93.54	87.81	92.29	62.08	90.43	100.86	100.27	99.70	84.36	81.18	102.93	102.36	103.20	102.43	**93.5**
MAYO	1	741	n/a	75.83	71.52	72.06	86.37	79.55	78.83	74.12	87.24	73.31	73.79	74.53	72.01	77.69	68.13	**76.9**
ROXBORO	2	639	n/a	64.44	65.98	80.03	5.16	74.55	91.30	81.77	102.63	79.80	95.49	96.27	93.24	94.41	88.60	**82.1**
ROXBORO	3	705	n/a	68.44	62.63	74.43	59.00	72.59	62.25	79.07	86.66	73.43	72.73	77.32	67.74	75.95	69.84	**72.4**
ROXBORO	4	698	n/a	67.77	66.91	62.51	78.94	71.32	72.84	69.66	80.28	74.50	45.17	0.00	50.99	78.60	55.89	**61.7**
FOSSIL TOT		2783	n/a	69.32	66.84	72.09	58.93	74.57	75.99	76.01	88.88	75.13	71.33	61.54	70.53	81.32	70.19	**73.3**
RICHMOND	7	147	n/a	26.76	19.31	39.31	80.37	28.26	51.41	52.98	77.19	62.50	0.00	4.49	20.64	40.77	14.68	**39.4**
RICHMOND	8	147	n/a	27.87	19.81	31.60	0.73	20.11	61.04	49.60	70.13	54.60	9.86	3.59	18.53	48.10	14.89	**31.9**
RICHMOND	ST4	160	n/a	31.59	22.26	38.54	40.84	26.36	61.63	56.12	81.93	64.74	5.11	3.95	21.24	45.18	15.21	**38.4**
CC TOTALS[2]		454	n/a	28.82	20.51	36.54	40.65	24.95	58.13	52.99	76.57	60.73	4.99	4.01	20.17	44.70	14.93	**36.6**

[1]The lifetime nuclear unit capacity factors are through February 2008

[2]CC designates Combined-Cycle units

EXHIBIT MAJ-1
Pg 2 of 2

Fossil Unit Outage Report
(100 Hrs or Greater Duration)
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

UNIT	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
Roxboro 2	3/30/2007[1]	4/27/07	656.75	Planned	Unit was taken offline for scheduled spring outage and to complete installation of scrubber
Roxboro 2	9/22/07	9/27/07	109.73	Planned	Unit was taken offline for scrubber inspection
Roxboro 3	4/12/07	4/17/07	103.15	Forced & Planned	Unit was forced offline due to main bank transformer bushing failure. Unit remained offline to clean air heaters
Roxboro 4	10/19/07	12/2/07	1,035.18	Planned	Unit was taken offline for major turbine outage, boiler inspection and installation of environmental modifications

[1]Roxboro 2 began this outage before the beginning of the review period.

EXHIBIT MAJ-2
Pg 1 of 2

Nuclear Unit Outage Report
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

UNIT	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
Brunswick 1	4/1/2007	4/6/2007	121.95	Forced	Unit was forced offline due to maintenance on an emergency diesel generator
Brunswick 1	9/8/2007	9/22/2007	347.72	Planned	Unit was taken offline to inspect and repair service water valve
Brunswick 2	3/3/2007[1]	4/18/2007	1110.53	Planned	Unit was taken offline due to scheduled refueling
Harris 1	9/28/2007	9/29/2007	1.47	Forced	Unit was forced offline due to start-up transformer trip
Harris 1	9/29/2007	10/23/2007	581.57	Planned	Unit was taken offline due to scheduled refueling
Robinson 2	4/7/2007	5/13/2007	885.33	Planned	Unit was taken offline due to scheduled refueling
Robinson 2	5/15/2007	5/17/2007	48.88	Forced	Unit was forced offline due to transformer wire short

[1]Brunswick 2 began this outage before the beginning of the review period.

EXHIBIT MAJ-2
Pg 2 of 2

EXHIBIT MAJ-3

MWH Generation Mix (April 2007 – February 2008)
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

MONTH	PERCENTAGE					
	FOSSIL	NUCLEAR	COMBUSTION TURBINE	COMBINED CYCLE	HYDRO	PURCHASED POWER
2007						
April	51.5	33.8	3.6	2.9	1.2	7.0
May	48.1	45.7	1.4	1.6	0.6	2.6
June	45.7	43.7	2.2	3.3	0.4	4.7
July	46.4	41.8	2.4	2.9	0.3	6.2
August	46.8	36.7	5.5	4.0	0.3	6.7
September	48.8	37.7	3.7	3.5	0.2	6.1
October	50.1	39.9	2.9	0.3	0.2	6.6
November	46.0	49.3	0.4	0.3	0.2	3.8
December	47.3	46.5	0.6	1.2	0.4	4.0
2008						
January	47.7	43.2	1.3	2.5	0.6	4.7
February	46.2	46.8	0.6	0.9	1.0	4.5
Average	47.7	42.3	2.2	2.1	0.5	5.2

EXHIBIT MAJ-4

Generation Statistics for Plants
(April 2007 – February 2008)
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

PLANT	TYPE FUEL	AVERAGE FUEL COST[1] (CENTS/KWH)	GENERATION (MWH)
Harris	Nuclear	0.456	5,647,076
Robinson 2	Nuclear	0.461	5,212,908
Brunswick	Nuclear	0.471	11,671,520
Robinson 1	Coal	2.652	1,100,829
Roxboro	Coal	3.024	13,807,284
Cape Fear	Coal	3.029	1,936,912
Lee	Coal	3.070	1,876,376
Asheville	Coal	3.071	2,174,067
Sutton	Coal	3.227	2,794,423
Mayo	Coal	3.273	3,842,212
Weatherspoon	Coal	3.364	864,474
Richmond Cty	Gas CC/CT	6.865/10.639	2,237,380

[1]The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

SC Retail Comparison of Estimated to Actual Energy Sales
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

		2007 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2008 JAN	FEB	TOTAL
[1]	ESTIMATED SALES [MWH]	508,135	518,621	600,481	650,872	676,925	641,158	542,018	489,028	562,796	639,714	577,793	6,407,541
[2]	ACTUAL SALES [MWH]	505,805	520,976	567,856	621,888	651,026	634,996	562,477	512,741	513,703	592,113	608,423	6,292,004
[3]	AMOUNT DIFFERENCE [1]-[2]	2,330	-2,355	32,625	28,984	25,899	6,162	-20,459	-23,713	49,093	47,601	-30,630	115,537
[4]	PERCENT DIFFERENCE [3]/[2]	0.46%	-0.45%	5.75%	4.66%	3.98%	0.97%	-3.64%	-4.62%	9.56%	8.04%	-5.03%	**1.84%**

EXHIBIT MAJ-5

SC Retail Comparison of Estimated to Actual Fuel Cost
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

		2007 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2008 JAN	FEB	PERIOD AVERAGE
[1]	ORIGINAL PROJECTION (¢/kWh)	2.146	2.391	2.563	3.105	2.801	2.090	2.575	2.162	2.165	2.208	1.953	2.378
[2]	ACTUAL EXPERIENCE (¢/kWh)	2.904	2.428	2.655	2.569	3.307	2.410	2.491	1.831	2.142	2.526	1.777	2.458
[3]	AMOUNT IN BASE (¢/kWh)	2.500	2.500	2.500	2.651	2.651	2.651	2.651	2.651	2.651	2.651	2.651	
[4]	VARIANCE FROM ACTUAL [1-2]/[2]	-26.10%	-1.52%	-3.47%	20.86%	-15.30%	-13.28%	3.37%	18.08%	1.07%	-12.59%	9.90%	-3.25%

EXHIBIT MAJ-6

EXHIBIT MAJ-7

History of Cumulative Recovery Account Report
Progress Energy Carolinas, Inc.
Docket No. 2008-1-E

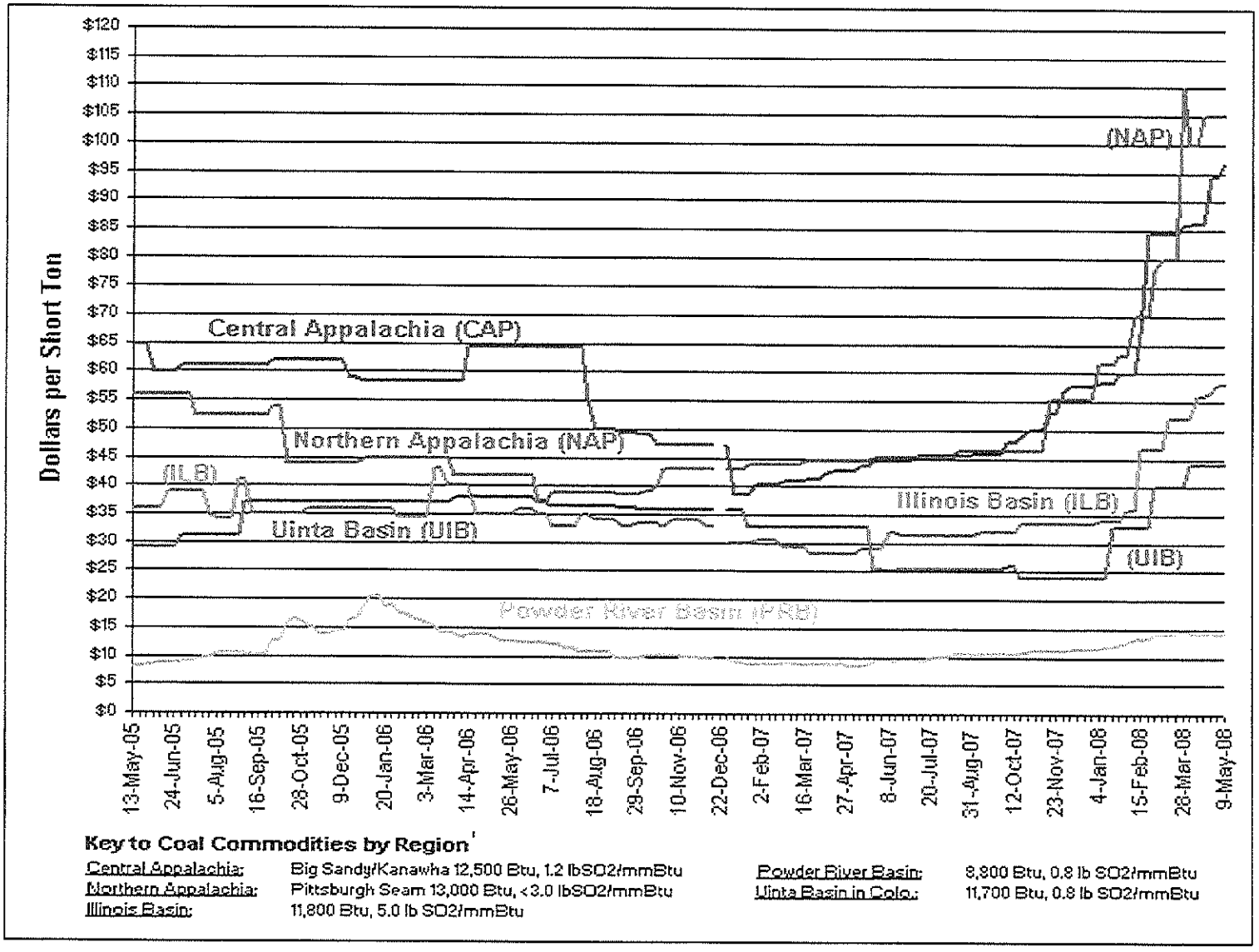
PERIOD ENDING		OVER (UNDER)$
December-79	$	1,104,730
September-80	$	(12,000,131)
March-81	$	(4,060,364)
August-81	$	(12,113,832)
March-82	$	(935,412)
September-82	$	(6,881,796)
March-83	$	(2,259,114)
September-83	$	(3,264,694)
March-84	$	109,270
September-84	$	2,172,859
March-85	$	(2,317,008)
September-85	$	745,913
March-86	$	1,972,280
September-86	$	(696,805)
March-87	$	2,408,354
September-87	$	3,310,059
March-88	$	(3,964,888)
September-88	$	(5,737,541)
March-89	$	(8,125,496)
September-89	$	(5,875,641)
March-90	$	(9,311,149)
September-90	$	(658,614)
March-91	$	1,403,023
September-91	$	4,661,988
March-92	$	5,201,112
September-92	$	(6,712,920)
March-93	$	(9,563,180)
September-93	$	- [1]
March-94	$	(1,010,684)
September-94	$	1,975,939
March-95	$	7,408,161
September-95	$	2,011,489
December-96	$	186,139
December-97	$	(6,212,396)
December-98	$	(14,334,022)
December-99	$	(17,967,157) [2]
December-00	$	(18,627,471)
December-01	$	(9,906,921)
December-02	$	(7,393,266)
December-03	$	(6,038,891)
March-05	$	(27,537,237)
March-06	$	(32,368,520)
March-07	$	(22,834,137)
February-08	$	(14,452,319)

Note 1: Eliminated $14,011,263 per Commission Order No. 93-865

Note 2: Reduced by $6,500,000 per Commission Order No. 1999-324

EIA Average Weekly Coal Commodity Spot Prices

Business Week Ended May 9, 2008



Key to Coal Commodities by Region

Central Appalachia:	Big Sandy/Kanawha 12,500 Btu, 1.2 lbSO2/mmBtu	Powder River Basin:	8,800 Btu, 0.8 lb SO2/mmBtu
Northern Appalachia:	Pittsburgh Seam 13,000 Btu, <3.0 lbSO2/mmBtu	Uinta Basin in Colo.:	11,700 Btu, 0.8 lb SO2/mmBtu
Illinois Basin:	11,800 Btu, 5.0 lb SO2/mmBtu		

EXHIBIT MAT-8